

NSLS OHSAS Job Risk Assessment

The only official copy of this file is the one on-line in the NSLS ESH website. Before using a printed copy, verify that it is the most current version by checking the document issue date on the NSLS ESH website.

Name(s) of Risk Team Members: B. Chmiel, J. Newburgh	Point Value → Parameter ↓	1	2	3	4	5
Job Title: General Flammable Gas Work Job Number or Job Identifier: LS-JRA-0011	Frequency (B)	≤once/year	≤once/month	≤once/week	≤once/shift	>once/shift
Job Description: Work with flammable gas cylinders and systems, including brazing and welding use.	Severity (C)	First Aid Only	Medical Treatment	Lost Time	Partial Disability	Death or Permanent Disability
Training and Procedure List (Optional):	Likelihood (D)	Extremely Unlikely <<1x/20yrs	Unlikely 1x/10-20yrs	Possible >1x/10-20yrs	Probable 1x/yr	Multiple >1x/yr
Approved by: W. R. Casey Date: 9/16/05 Rev. #: 1 Revision Log	Stressors (if applicable, please list all): Weather related (cylinders stored outdoors)		Reason for Revision (if applicable):		Comments:	

		Before Controls							After Initial Controls						After Additional Controls					
Job Step / Task	Hazard	Stressors Y/N	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Initial Controls	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Control(s) Added to Reduce Risk	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	% Risk Reduction
Transporting gas cylinders between storage area and area of use.	Overexertion injuries – excessive lifting, pushing, pulling, holding or carrying.	Y	1	3	3	4	36	Wheeled gas carts, training, cylinders secured properly, storage area well maintained, door threshold design	1	3	3	3	27							

NSLS OHSAS Job Risk Assessment

The only official copy of this file is the one on-line in the NSLS ESH website. Before using a printed copy, verify that it is the most current version by checking the document issue date on the NSLS ESH website.

		Before Controls							After Initial Controls						After Additional Controls					
Job Step / Task	Hazard	Stressors Y/N	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Initial Controls	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Control(s) Added to Reduce Risk	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	% Risk Reduction
Transporting gas cylinders between storage area and area of use.	Fire or explosion due to ignition of flammable gas release.	N	1	3	5	3	45	Cylinder certification, training, cylinders capped and secured. Proper strapping at area of use.	1	3	5	2	30							
	Being struck by an object due to pressure release.	N	1	3	3	3	27		1	3	3	2	18							
	Being stung by bees or wasps nesting in cylinder caps	N	1	3	2	2	12	Check for nest before moving cylinder	1	3	2	2	12							
Connecting and disconnecting: Regulator to/from cylinder Or Regulated cylinder to/from manifold or system	Fire or explosion due to ignition of flammable gas release.	N	1	3	4	3	36	Use of proper regulator, Experimental Review, No adapters permitted, training	1	3	4	1	12							
	Strain injuries	N	1	3	2	3	18	Use of proper tools, Tighten the assembly with one hand only.	1	3	2	2	12							
	Being struck by object due to pressure release.	N	1	3	3	3	27	Regulator design, gas system design/review, cylinders secured, training.	1	3	3	2	18							
Use of flammable gas for experiments	Fire or explosion due to ignition of gas.	N	1	3	4	3	36	System design review, training, experimental review, ventilation, limit quantities of gas in use, spark resistant tools, explosion proof rated components.	1	3	3	2	24							

NSLS OHSAS Job Risk Assessment

The only official copy of this file is the one on-line in the NSLS ESH website. Before using a printed copy, verify that it is the most current version by checking the document issue date on the NSLS ESH website.

		Before Controls							After Initial Controls						After Additional Controls					
Job Step / Task	Hazard	Stressors Y/N	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Initial Controls	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Control(s) Added to Reduce Risk	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	% Risk Reduction
	Being struck by object due to pressure release.	N	1	3	3	3	27	Equipment inspection, gas system design/review, cylinders secured, training, Tier I	1	3	3	2	18							
Use of flammable gas for soldering, brazing or welding.	Fire or Explosion due to improper gas mixture or leaking hoses, nozzles or valves	N	1	3	4	3	36	Hot work permit, fire watch, fire extinguisher training, inspection of equipment before use, training	1	3	4	2	24							
	Fire due to ignition of surrounding combustible materials	N	1	3	4	3	36	Hot work permit, fire watch, fire extinguisher training, remove combustibles from the area.	1	3	4	2	24							
	Contact with temperature extremes (burns).	N	1	3	2	3	18	Personal Protective Equipment, training	1	3	2	2	12							
	Eye injury from visible light/UV exposure	N	1	3	4	5	60	Properly rated welding goggles, flash curtains	1	3	4	1	12							
Use of oxidizing gases (in addition to flammable gas use hazards)	Fire due to reaction of gas with surrounding materials.	N	1	2	4	3	24	Work planning, ventilation, limit quantities of gas in use, limit combustible storage, training	1	2	4	2	16							

NSLS OHSAS Job Risk Assessment

The only official copy of this file is the one on-line in the NSLS ESH website. Before using a printed copy, verify that it is the most current version by checking the document issue date on the NSLS ESH website.

		Before Controls							After Initial Controls						After Additional Controls							
Job Step / Task	Hazard	Stressors Y/N	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Initial Controls	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Control(s) Added to Reduce Risk	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	% Risk Reduction		
Further Description of Controls Added to Reduce Risk:																						
*Risk:	0 to 20 Negligible	21 to 40 Acceptable						41 to 60 Moderate					61 to 80 Substantial					81 or greater Intolerable				